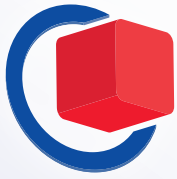


Nuremberg, Germany
10.–12.3.2026



embeddedworld
Exhibition & Conference

CONFERENCE PROGRAM

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Elektronik

Tuesday, 10 March

9:30-13:00	Class 2.1 Faster. Smarter. Firmware. Modern Best Practices for Better Embedded Systems Jacob Beningo, Beningo Embedded Group	Class 2.2 Hands-On Zephyr Project Workshop Jonas Rimmert, SMIGHT	Class 4.1 Soft Logic, Hard Math: Building a RISC-V FPU With IEEE 754 Support on FPGAs Mark Honman, Altera	Class 7.1 Introduction to tinyML – Deploying Deep Learning Models Onto Low-power Micro-Controllers Prof. Daniel Müller-Gritschneider, TU Wien
14:00-17:00	Class 4.2 Safeguarding Industrial Interfaces: Reliable Protection Against Transient Overvoltage Dr. Heinz Zenkner, Würth Elektronik eiSos	Class 5.1 Rust, a Safe Language for Low-level Programming Prof. Dr. Stefan Wehr, Hochschule Offenburg	Class 5.2 GitLab for Embedded DevOps: Integrated AI for Both DevSecOps Adoption and Product Delivery Darwin Sanoy, GitLab	Class 7.2 Edge AI: Evolution and Hands-on Danilo Pietro Pau, STMicroelectronics

Wednesday, 11 March

9:30-13:00	Class 3.1 CRA Regulations and Certification Joe Lomako, TÜV SÜD	Class 5.3 Programming With Rust for C/C++ Programmers Prof. Dr. Dieter Nazareth, Landshut University of Applied Sciences	Class 5.4 C++ and Modern C++ for Embedded Development Dr. Carmelo Loiacono, Green Hills Software	Class 7.3 From Vision to Deployment: Developing Secure AI-Enabled Linux Devices Raul Muñoz, Foundries.io
14:00-17:00	Class 2.3 Embedded GNU/Linux in Mid-integrity/Mixed-criticality Safety-related Systems Prof. Nicholas Mc Guire Open Source Automation Development Lab (OSADL) eG	Class 2.4 Embedded Linux Security Exercised on the Secure Platform GyroidOS Dr. Michael Weiß, et al., Fraunhofer AISEC	Class 3.2 Cyber Resilience Act (CRA) – Practical Implementation Examples Stefan Grohmann, Hitex	Class 3.3 Embedded Safety Architectures Alessandro Bastoni STMicroelectronics

Thursday, 12 March

9:30-16:30	Class 2.5 Introduction to Embedded Linux Using a Yocto Project SDK Robert Berger, Reliable Embedded Systems	Class 4.3 FPGA-Design Using C/C++ and High-Level Synthesis Prof. Dr. Frank Kesel, Hochschule Pforzheim	Class 4.4 Designing Battery-free IoT Herman Roebbers, Capgemini Engineering	Class 5.5 Embedded Software Testing – With Fundamental Skills and Artificial Intelligence Dr. Stephan Grünfelder, Stephan Grünfelder	<p>Classes: In the embedded world Classes, reputed experts speak on special topics for half a day or a full day. This format is aimed primarily at participants who want to familiarize themselves thoroughly and efficiently with a specific topic.</p> <p>Be sure to register now!</p>

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	1. IOT & CONNECTIVITY	2. EMBEDDED OS	3. SAFETY & SECURITY	3. SAFETY & SECURITY	4. HARDWARE DESIGN	5. SOFTWARE & SYSTEMS ENGINEERING	6. EMBEDDED VISION		
10:00-10:15	Words of Welcome Prof. Dr. Axel Sikora, Hochschule Offenburg/Hahn-Schickard			Words of Welcome Prof. Dr. Axel Sikora, Hochschule Offenburg/Hahn-Schickard					
10:15-10:45	Conference Keynote: Learning from the Octopus: Nature's Blueprint for Intelligence Everywhere Rich Simoncic, Microchip Technology			Conference Keynote: Learning from the Octopus: Nature's Blueprint for Intelligence Everywhere Rich Simoncic, Microchip Technology					
	1.1: Ambient IoT	1.4: WiFi and Long-Range	2.1: Long-Term Stability with Yocto	3.1: Implementing the Cyber Resilience Act (CRA)	3.4: Open Source for Safety & Security 1	4.1: Chipllets in Automotive Applications	5.1: Programming Languages: Rust	5.4: Software Architectures	6.1: Concepts and Standards
11:00-11:30	The Ambient IoT Alliance: Mission, Vision, and the Path to Pervasive Connectivity Stephen Statler, Ambient IoT Alliance	Wi-Fi HaLow The Future of Long-Range Connectivity is Here! Boliang Xu, Vantron Technology	Linux Kernel Hardening With the Yocto Project Michael Opdenacker, Root Commit	Unlocking Cyber Resilience: What the CRA Means for Embedded Systems and Your Business Andrés Muñoz, Microchip Technology	Open Functional Safety: Safety-Qualified Lifecycle with Sphinx Christopher Zimmer, innotec	Chipllets: A Game-Changer for Advanced Automotive Computing Dr. Ericles Sousa, Cadence Design Systems / UCle AWG	From C to Rust: Modernizing Firmware Development for Resource-Constrained Embedded Devices Jürgen Fitschen, SSV Software Systems	From Embedded Systems to Embedded Intelligence: Architectural Patterns for Autonomous Industrial Operations Afshin Asli, Synaptrix Technologies	How to Run Smart-Phone AI Models on a Microcontroller in Real-time With MicroPython Kwabena Agyeman, OpenMV
11:30-12:00	Ambient IoT in Action Simon Ford, Blecon Ltd	Wi-Fi 8: A Deep Dive into IEEE802.11bn for Ultra-High Reliability Joerg Koeppe, Rohde & Schwarz	Beyond the Release: Managing Long-Term Risk and Compliance in Embedded Linux with Yocto Anna-Lena Marx, inovex	Cyber Resilienc Act and Open Source Software Companies. A Practical Guide Davide Ricci, Linaro	Approaches on Assessing Safe Usage of Linux Kate Stewart, Linux Foundation	Enabling Chipllet-Based Solutions for Autonomous Driving Systems Gil Golov, Socionext Europe	Reliable Real-time with Rust Using the Example of Automation Technology Marc Fischer, Universität Stuttgart	Building a Safety-Certifiable Open Middleware for POSIX-Based Automotive Platforms Philipp Ahmann, ETAS (BOSCH)	Take Back Control of Your Cameras with libcamera Laurent Pinchart, Ideas on Board
12:00-12:30	Security and Privacy for Ambient IoT: Challenges and Options Steve Hanna, Infineon Technologies	Long-range Low-power Communications: Advancements in LoRa, WM-Bus, mioty, and NB-IoT Victor Royant, STMicroelectronics	Linux Kernel Upgrades in Yocto: Strategy, Constraints, and Vendor Support Enrico Bragante, Witekio	CRA Risk Assessment and Scoring for Non-IP Embedded Communication Systems Olaf Pfeiffer, Embedded Systems Academy	Leveraging Open Source for IEC 62443-Compliant Embedded Systems Dr. Florian Kauer, Linutronix	High-level Modelling Methodology to Evaluate Automotive Chipllet Archetypes Dr. Diksha Moolchandani, imec	Understanding the Rust Borrow Checker Leonardo Held, Toradex	A Complete Open-Source, Functionally Safe Software Stack for the Software Defined Vehicle Dr. Oliver Pajonk, Elektrobit Automotive	Kamaros – Advancing an Open Camera API Architecture for Embedded Vision Harri Kaimio, NVIDIA
12:30-12:45	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A
	Lunch Break & Networking				Lunch Break & Networking				
	1.2: IoT Ecosystem Technologies 1	1.5: CAN Technologies	2.2: Yocto Use Cases	3.2: Post Quantum Cryptography Strategies	3.5: Open Source for Safety & Security 2	4.2: Chipllets – Certification, Validation & Test	5.2: Programming Languages	5.5: Development Processes for SW-Defined Vehicles (SDV)	6.2: Hardware Acceleration
13:45-14:15	Scaling Edge AI for the IoT Era: From Fragmented Devices to an Intelligent, Connected Edge Yaron Galitzky, Ceva	CAN XL & FD are Ready for the SDV Dr. Arthur Mutter, Robert Bosch	TPM-Based Disk Encryption on Raspberry Pi with Yocto Josef Holzmayr, Northern.tech Inc. (Mender.io)	Post-Quantum Cryptography in Embedded Systems: Migration Strategies for 2030 Readiness Dr. Joost Renes, NXP Semiconductors	Open Source for Safety-Critical Systems: A Landscape Exploration Philipp Ahmann, ETAS (BOSCH)	Building Trust and Transparency Across the Chipllet Ecosystem: A Standardized Security Framework Prof. Dr. Sylvain Guilley, Secure-IC	Rust Guidelines and Standards – A State of the Feld Report Alex Celeste, Perforce Software	SDV Applications for Automotive ECUs: Achieving Cybersecurity and Functional Safety Compliance Through a Holistic Software Product Lifecycle Management Dr. Ahmed Majeed Khan, SystemWeaver	CPU and Co-Processor Paradigms for Edge AI Inference: Implications for NPU Design Omar Lone, Züricher Hochschule für Angewandte Wissenschaften (ZHAW)
14:15-14:45	Securing Device Credential Provisioning: Matter and the Wider IoT Ecosystem Dr. Xin Qiu, CommScope	Tunneling and mapping of CAN-based communication via Ethernet and Bluetooth Dr. Martin Merkel, CAN in Automation (CIA)	Maintaining ROS on Yocto: A Survival Guide for Embedded Open Source Integrators Rob Woolley, Wind River	How to Upgrade to Long Term Security with Post Quantum Cryptography Oliver Winzenried, WIBU-SYSTEMS	Owning the Stack: Open-Source Device Management Without SaaS Lock-In Julien Vermillard, Clunky Machines	Analyzing Fault Propagation and Coverage in Chipllet-Based SoCs with Improved Colored Petri Nets Ernesto Cristopher Villegas Castillo, Cadence Design Systems	Architecture-Aware C/C++ to Rust Migrations Dr. Daniel Simon, The Qt Company	A Performance Comparison Study of Embedded Hypervisors for Software-Defined Vehicles Developed in Rust and C/C++: Focusing on ARM-based MCU SoCs Dr. Sang-Bum Suh, Perseus Co.	FPGA + GPU: A Hybrid Vision for Embedded AI Dr. Tony Albrecht, hema electronic
14:45-15:15	Zigbee 4.0: Connecting Devices Safely, with Low Power Efficiency Across Generations Faisal Bhaiyat, Silicon Labs	From Classical CAN to CAN FD, What is the Impact on the Physical Layer? Magnus Hell, Infineon Technologies	Modern Yocto Linux Best Practices: Evolving Beyond the Basics Margarita Manterola Rivero, Igalia	Detecting Cryptographic Algorithms for Quantum-Ready Embedded Systems Matias D'aloia, Scan Open Source Solutions	AI for Managing Embedded Linux Vulnerabilities: Too Good to Be True? Dr. Julien Bernet, The Embedded Kit	Wafer-Level Test Concept for the UCle Interface Alexander Persicke, Racyics	Fuzion – A Language Designed for Safety-Critical Embedded Systems Dr. Fridtjof Siebert, Tokiwa Software	From Open Source to Automotive-Grade: Distributing Eclipse S-CORE for Safety-Critical and Real-Time Embedded Systems Lars Bauhofer, Qorix	Adaptive Multispectral Imaging with Onboard AI Based on a Reconfigurable FPGA Architecture Filip Novoselnik, Protostar Labs
15:15-15:30	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A
	Coffee Break & Networking				Coffee Break & Networking				
	1.3: IoT Ecosystem Technologies 2	1.6: CAN Safety & Security	2.3: RTOS Orchestration	3.3: Long-Term & Post Quantum Security	3.6: Trusted Artificial Intelligence	4.3: MIPI Interfaces	5.3: MISRA SW-Coding Guidelines	5.6: Open Source Software	6.3: Pipelines
16:00-16:30	Hybrid IoT Connectivity Solutions for Smart Homes and Smart Factories Andrés Muñoz, Microchip Technology	Functional Safety in CAN XL Dr. Thomas Cwienk, DCD-SEMI	Choosing the Right Software Foundation: Bare-Metal, RTOS, or Embedded Linux Pierre Lecomte, Witekio	Secure Bootloader Signing Workflow for Arm-Based Embedded Systems: Enabling Compliance and Integrity Dr. Xin Qiu, CommScope	Integrating Edge AI in Safety-Critical Embedded Systems – Safety Still Ensured? Eranyan Ravanan, Hitex GmbH	MIPI I3C Serial Bus: Latest Features and Market Applications Michele Scarlattella, MIPI Alliance	MISRA – A Year in Review, and a Look Ahead Andrew Banks, LDRA	Understanding Open Source License Compliance in an OTA Situation Josef Holzmayr, Northern.tech Inc. (Mender.io)	Synchronized Vision Pipelines for Efficient Multi-Camera Perception Florian Netter, Advanced Micro Devices (AMD)
16:30-17:00	Multiprotocol Connectivity in Smart Homes: Enhancing Interoperability and User Experience Devanjan Sikdar, Silicon Labs	Enhancing Functional Safety & Security Aspects of CAN XL in Automotive Systems Dr. Nikos Zervas, Computer Aided Software Technologies Inc. (CAST)	Real-Time Meets Cloud: Orchestrating RTOS and Linux with Kubernetes Andrei Kholodnyi, Wind River	Secure Boot and Firmware Signing – The Best Use-cases to Get Started with Post-Quantum Cryptography Guillaume Crinon, Keyfactor	From Secure DFT to Lifecycle Security: Enabling SLM in Complex AI/HPC SoCs Dr. Shahram Mossayebi, Crypto Quantique	Turning Up the Volume: How SoundWire I3S Transforms Embedded Audio Ettore Antonino Giliberti, SmartDV Technologies	MISRA C:2023 & MISRA C++:2023: So Close Yet So Different Loïc Joly, SonarSource	Open Source Hardware-in-the-Loop Testing Detlef Vollmann, vollmann engineering	Efficient Image Registration Methodology for Depth and RGB Camera Sagar Dhatrak, elfinchips - an Arrow Company
17:00-17:30	Ambient IoT at µW Budgets: A 2026 Update Across 3GPP, IEEE 802.11, and Bluetooth LE Rakesh Taori, Infineon Technologies	Overview of Emerging CAN Security Standards in the Context of CRA and IEC 62443 Olaf Pfeiffer, Embedded Systems Academy	Beyond Cyclictest: a Unified Benchmark Framework for POSIX Compliant RTOS on ARM Processor Lei Zhou, Linaro	Trusted Resilience Edge: Unified FPGA-TPM for Post-Quantum Cryptography RED & Cyber Resilience Act Eric Sivertson, Lattice Semiconductor	AI-Powered Intrusion Detection at the Edge: Hardware Anchors for Software Resilience Prof. Dr. Sylvain Guilley, Secure-IC	Wired for Intelligence: SWI3S The New Sensor Interface for Ambient AI Manuela Heiss, Infineon Technologies	High-Quality Code Meets Industry Standards: Linux and MISRA in Perspective Prof. Dr. Roberto Bagnara, BUGSENG / University of Parma	Free But Not Cheap: The Journey of Productizing Open Networking Software Bruno Banelli, Sartura	Efficient Edge AI in Action: Practical Advantages of Model Sparsity Yaron Raz, Microchip Technology
17:30-17:45	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A

	1. IOT & CONNECTIVITY	2. EMBEDDED OS	3. SAFETY & SECURITY	4. HARDWARE DESIGN	5. SOFTWARE & SYSTEMS ENGINEERING	6. EMBEDDED VISION	7. EDGE AI	8. USE CASES FOR EMBEDDED	
	1.7: Ethernet Time-Sensitive Networking (TSN)	1.10: Cellular – Emerging Technologies	2.4: Zephyr – Best Practice	3.7: Reliable Architectures	4.4: System on Chip Design Process	5.7: Testing Embedded Software	6.4: Emerging Embedded Vision & Audio echnologies	7.1: Lightweight Embedded AI	8.1: Medical Applications
10:00-10:30	Maintaining Time Synchronization in High Network Traffic Applications Schuyler Patton, Texas Instruments	The Cellular Revolution: Trends, Security, and Emerging Capabilities Hans Andersson, ACAL BFI Germany	Zephyr: 10 Years After Launch Kate Stewart, Linux Foundation	What is the Future of Using Standard Complex Semiconductors in Safety Applications? Alessandro Bastoni, STMicroelectronics	Bridging the Virtual and Physical Divide: A Comparative Methodology for Validating Complex SoCs Prashant Yadav, The Judge Group	Unit Testing for Embedded Development: From Real Silicon to Emulated Environments Iliia Motornyi, JetBrains	Extreme Low-bit Quantization for Real-world Edge AI Daniel Chang, ENERZAI	Tiny Foundation Models: Exploring Scalable Pretrained Architectures for Embedded AI Nitish Kumar, The Judge Group	Sustaining Medical Devices: The Long-Term Support Imperative Pierre Lecomte, Witekio
10:30-11:00	Harnessing Linux Timekeeping for Multi-Domain Precision Time Protocol in Time-Sensitive Networking Weifeng Voon, Intel	Sky-High RAN: Bridging Terrestrial to Satellite in 5G/6G with FPGAs Dr. Hossam Fattah, Lattice Semiconductor	How to Migrate from FreeRTOS to Zephyr RTOS Jacob Beningo, Beningo Embedded Group	Most Automotive MPU Strategies Have Hidden Safety Flaws, Is Yours One of Them? Kevin Brand, Synopsys	Evaluating Tiled Convolution Designs on SoC-FPGA with Unified HW/SW Performance Metrics Prof. Dr. Guy Bois, Polytechnique Montreal	Agile Testing for Microcontroller Projects – What are Realistic Objectives? Daniel Penning, embeff	Unlock Real-Time Visual Intelligence with Generative AI at the Edge Wilfried Rakow, NVIDIA	Lightweight and Secure MCP for Embedded AI: Bringing Agent Protocols to the Edge Jürgen Belz, PROMETO	Confronting the Connectivity Challenge in Endoscopic and Robotic Surgeries Effi Goldstein, Valens Semiconductor
11:00-11:30	Hard-Earned Wisdom from TSN Interop Events: Lessons You Can't Afford to Miss Ionel Ghita, Keysight Technologies	Voice Over NB-IoT NTN – Is it Viable? Richard Carter, Communications Consultants WorldWide	Practical Zephyr: Boosting Your Embedded Workflow Benjamin Cabé, The Zephyr Project	The Challenge of Sharing: Building Safe Mixed-Criticality Systems Ofra Bechor, Green Hills Software	Design of Domain Specific Accelerators with High-Level Synthesis Prof. Russell Klein, Siemens EDA	Did We Test the Right Things? Prevent Production Defects with Test Gap Analysis Jonas Bogenberger, CQSE	From Foundation to Factory: Adapting Foundational Vision Encoders to Custom OCR at the Edge Alex Avery, D3 Embedded	Generate Plain C/C++/CUDA Code from TensorFlow and PyTorch Models Using MLIR Christoph Stockhammer, The MathWorks	Design Review of Embedded Medical Sensor & Camera Platform with Emphasis on Medical EMC Solutions Ozan Günaydin, Brainlab/Snke OS
11:30-11:45	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	
Lunch Break & Networking					Lunch Break & Networking				
	1.8: Single-Pair Ethernet	1.11: Cellular – 5G	2.5: Zephyr in Safety-Critical Applications	3.8: Reliable Code / Safe Rust	4.5: System Hardware – Design Examples	5.8: Trustable Embedded Software	6.5: EV Use Cases	7.2: Neuromorphic Computing	8.2: Predictive Maintenance Applications
12:45-13:15	Extending Ethernet to the Industrial Edge: Practical Insights into 10BASE-T1L and PoDL Deployment Nina Lai, Netio Technologies Co.	Securing the Next Wave of Connectivity: 5G Cybersecurity Challenges and Solutions for Embedded IoT Systems Simon Mullenger, Telit Cinterion	Zephyr's Roadmap to a Pre-Certified Kernel for Safety-Critical Systems Dr. Tobias Kästner, inovex	How To Use Formal Methods To Detect Runtime Faults in Mixed C, C++ & Rust Codebases Steve Barriault, TrustInSoft	Deterministic Co-Design of RL-Tuned iLQR on a Heterogeneous SoC Platform Marco Torelli, TXT e-tech	Eclipse Trustable Software Framework: A New Industry Standard for Embedded Systems John Ellis, Codethink	Extending HDR Capabilities in Smart Vision Systems via Multi-Exposure Fusion and Adaptive Tone Mapping Dr. Alex Lopich, Altera	Neuromorphic Deployments Made Easy: from Datasets to Applications Dr. Petrut Antoniu Bogdan, Innatera Nanosystems	Modernizing Railway Brake Diagnostics: A Raspberry Pi DAQ Approach Prof. Dr. Georgi Nikolov, Darmstadt University of Applied Sciences
13:15-13:45	Increasing Fault Tolerance of 10BASE-T1S Multidrop Networks with PLCA Coordinator Redundancy Arndt Schübel, onsemi	MicroTCA Next Gen: A New Backbone for High-Performance Embedded Systems Brandon Lewis, Samtec	Turning the Ignition on Safety: Zephyr RTOS in Automotive Compliance Saravanan Sekar, Linumiz	Addressing Functional Safety with Rust Jill Britton, Perforce	Designing Smart Displays with STM32 MCUs: Usecases from Industrial, Automotive, and Medical Applications Sakshi Madaan, Anders Electronics	AI-Generated Code for Critical Systems: Can We Trust It? Miroslaw Zielinski, Parasoft	Enhancing Industrial Visual Inspection with Expert-guided, Feedback-driven AI Lena Heidemann, Fraunhofer IKS	Going Beyond the von Neumann Wall: In-Memory and Neuromorphic Computing for Efficient Embedded AI Sebastian Karl, Fraunhofer IIS, Fraunhofer Institut für Integrierte Schaltungen	Motor Predictive Maintenance Using Edge AI Dr. Han Zhang, Texas Instruments
13:45-14:15	Classic Connection Technology Meets Modern Data Transmission – PCB Terminal Blocks Enable Single Pair Ethernet (SPE) Andy Schäfer, Phoenix Contact	Open, Agile, Intelligent: The Future of 5G with AI and ORAN Dr. Hossam Fattah, Lattice Semiconductor	Industrializing Zephyr for Safety-Critical Products: A Four-Pillar CI Playbook Prof. Dr. Roberto Bagnara, BUGSENG / University of Parma	Rust on the Road: Navigating Challenges and Opportunities in Automotive Sjoerd van der Zwaan, Solid Sands	Benefits of Embedded Mixed Signal IC Solutions for Type-C Rapid Battery Charger Applications Dr. Robert Vartanian, Infineon Technologies	Safely and Securely Combining Trusted Rust Code with Untrusted Software Andre Schmitz, Green Hills Software	Isolated Camera Serial Interface Integration with GMSL for High-Reliability Imaging Systems Prasanthi Yerra, Analog Devices	New Semiconductor Platform for Neuromorphic Computing and Gen 3.0 In-Memory Edge AI Applications - The Embedded TiF-Memristor-Xbar Prof. Dr. Heidemarie Krüger, TECHiFAB	Vibration Monitoring: Integrating Precision Sensing with Edge AI Processing Dr. Lisa Trollo, STMicroelectronics
14:15-14:30	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	
Coffee Break & Networking					Coffee Break & Networking				
	1.9: Applying Ethernet Technologies	1.12: Cellular – eSIM	2.6: Zephyr Use Cases	3.9: Reliability Testing	4.6: Architectural Design	5.9: Formal Verification	6.6: Radar and Artificial Intelligence	7.3: Qualification and Validation	8.3: Mobility Applications
15:00-15:30	Simplifying Multi-Protocol Industrial Ethernet: One Design, Every Protocol Thomas Mauer, Texas Instruments Deutschland	Realising the Transformative Potential of eSIM for the IoT Cyril Proye, Thales	Zephyr Squared: Zephyr and Linux 'Side by Side' on the Same Device Hugh Breslin, Microchip Technology	Safety and Security by Design Through Formal Methods Mark Hermeling, AdaCore	Minimizing Power in Clock Domain Crossing: Architectural Innovations for SoC Design Aradhana Kumari, STMicroelectronics	Formal Verification in Practice: Experiences from Embedded Software Projects Markus Krahl, Munich University of Applied Sciences HM	Applying Artificial Intelligence in Radar Sensing Applications Kottyn Quintanilla, Texas Instruments	Qualification of AI/ML Systems and Interfacing Devices Steve DiCamillo, LDRA	Bringing Native Maps and Navigation to Resource-Constrained MCUs Sumitabh Ghosh, Qt Group
15:30-16:00	Debugging a System of Microcontrollers over Ethernet Dr. Albrecht Mayer, Infineon Technologies	How SGP.32 eSIM Accelerates Secure Supply Chain Digitalization Cyril Proye, Thales	The RTOS Puzzle: How Far Can We Go in Vulnerability Management? A Zephyr Case Study Pierre Gal, The Embedded Kit	Sound Static Application Security Testing Dr. Daniel Kästner, AbsInt Angewandte Informatik	MIPI A-PHY as an Enabler for Remote Multi-Head "Smart Camera" Architecture Jonathan Regalado-Hawkey, Valens Semiconductor	Usage of Formal Methods in Embedded Software Development to Automate Test Case Generation Based on Model Coverage Gaps Vincent Rossignol, Ansys, part of Synopsys	Radar Development Essentials: Overcoming Complexity with the Right Tools Katsuhiko Atsumi, NXP Semiconductors Germany	Implementing ISO/PAS 8800: 2024 to Assure Safety and Enable Deployment of AI in Embedded Systems Ricardo Camacho, Parasoft	Enhancing Steering Wheel Safety Through AI-Based Signal Correction Jasmin Frick, invenio
16:00-16:30	Leveraging High-speed Ethernet for Scalable Audio in Automotive Zonal Control Systems Dr. Giuseppe Di Giore, STMicroelectronics	How eSIM is Evolving into a Multi-Application Secure Platform Gil Bernabeu, GlobalPlatform	How Zephyr Delivers Low Power Dr. Ayoub Bourjilat, AC6	Hyper Coverage with Integration Testing: How Can I Get Half of My Test Cases for Free? Dr. Alexander Weiss, Accemic Technologies	AI-Driven NoC Topology Optimization for Large-Scale SoC Designs André Bonnardot, Arteris	Making Software Formal Verification Methods A Viable Technique In An Industrial Setting Steve Barriault, TrustInSoft	Imaging Radars for Physical AI Dr. Gor Hakobyan, Waveye	From Cloud to Edge: Digital Twin Frameworks for Real-Time Autonomous System Validation Nitish Kumar, The Judge Group	Radar and Lidar Fusion for Enhanced Perception in Urban Air Mobility Marco Roggero, The MathWorks
16:30-16:45	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	

	1. IOT & CONNECTIVITY	2. EMBEDDED OS	3. SAFETY & SECURITY	4. HARDWARE DESIGN	4. HARDWARE DESIGN	5. SOFTWARE & SYSTEMS ENGINEERING	7. EDGE AI	8. USE CASES FOR EMBEDDED	
	1.13: Bluetooth – Best Practices 	2.7: Container Use Cases	3.10: Ensuring Resilient Embedded Systems	4.7: Hardware Design & Production Process 	4.10: RISC-V Ecosystem 	5.10: DevOps & CI/CD Pipeline	5.13: Digital Twin	7.4: Execution	8.4: Development Processes
09:30-10:00	Data-Driven Bluetooth LE Development: Measuring What Matters for Connection Stability and Power Efficiency Gillian Minnehan, Nordic Semiconductor	Managing Container Updates – Challenges and Solutions André Detsch, Foundries.io	100 Million Inputs or it Did Not Happen: Fuzzing Full Embedded Software Via Rehosting Tobias Scharnowski, CISPA Helmholtz Center for Information Security	The Challenge of Sharing Structured Knowledge with GenAI Tools Jürgen Mayer-Zintel, Infineon Technologies	The Growing Software Ecosystem for RISC-V Richard York, SiFive	Platform Integrated AI Reduces The Cognitive Load of Onboarding to Embedded DevOps Darwin Sanoy, GitLab	Security First: Why Digital Twins Need a Trusted Foundation Sebastian Rohr, umbrella.associates	A Review, a Proposal and an Extrapolation on the Theme of Edge AI Execution Frameworks Prof. Hans Dermot Doran, Zürcher Hochschule für Angewandte Wissenschaften (ZHAW)	Informed Systems Engineering Decision-making Through SysML v2 Modelling with Architecture Simulation Dr. Bernhard Kaiser, Ansys Germany
10:00-10:30	Precision Distance Measurement with Bluetooth Channel Sounding - The Technical Case for Multi Antenna Support Jonathan Kaye, Ezurio	Commodization of Distro Building: Why Bootable Containers Will Transform Embedded Linux Development Leonardo Held, Toradex	From Firmware to Keys: Reverse Engineering Cryptography in Embedded Devices Dr. Nils Albartus Emproof	Good Documentation Practices Meet Modern, Development and Design Needs Dr. Marco Häuser, Marco Häuser Design MHD	Scalable Benchmarking and Profile-Based Alignment for RISC-V Ecosystems Angel Berrio, Quintauris	Using CI/CD for Grass Roots Software Quality Improvements Mark Hermeling, AdaCore	Lightweight Digital Twins and Co-Simulation for Physical AI Dr. Pablo Oliveira Antonino, Fraunhofer IESE	Deploying Energy-Efficient Machine Learning at the Edge: A Practical Approach David Fosca Gamarra, Texas Instruments	WinLightNet: A Self-Distillation Technique for Time Series Classifications on Constrained Devices Ghaia Belaakaria, Schneider Electric
10:30-11:00	Building Distributed Beacon Networks with Bluetooth Donatien Garnier, Blecon	From Regret to Reproducibility: Why Embedded Workflows Belong in Containers David Källberg, IAR	Inherent Trust: How Hardware Identity can Secure the Global Supply Chain Dominic Rizzo, ZeroRISC	Approach to Optimize Quality, Cost and Delivery for PCBs Georg Thämer, Festo SE	Toward a Holistic Compute Platform for Mixed-Criticality RISC-V Platforms Dr. Sandro Pinto, University of Minho	DevOps for Systems Engineering in Software-defined Vehicles Dr. Frank Schreiner, AUMOVIO Engineering Solutions	Virtual Prototypes for Embedded Systems – Transforming Product Development Christopher Schwager, CarByte Engineering	Running Transformer Models Efficiently on Edge Devices with Static AI Engines Sauryadeep Pal, Synaptics	PID Autotuning Via Neural Network Fully Implemented in Programmable Logic with Heterogeneous SoC Architecture Marco Torelli, TXT e-tech
11:00-11:15	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A
Coffee Break & Networking					Coffee Break & Networking				
	1.14: Bluetooth – Emerging Technologies 	2.8: Beyond Virtualization	3.11: Trustworthy Systems with CHERI & RISC-V 	4.8: Hardware Design Examples	4.11: RISC-V Applications 	5.11: Workflows and Tools	5.14: SW Debugging and Tracing	7.5: From Lab to Field	8.5: Security Applications 1
11:45-12:15	Introduction to Bluetooth Ultra Low Latency (ULL) HID Alfredo Perez, Bluetooth SIG	Reevaluating the Role of Hypervisors in Safe and Secure Software Partitioning Marcus Nissemark, Green Hills Software	Building Safe and Secure Systems with RISC-V Gerard Vink, TASKING	PCB-Design of High-Speed Boards Prof. Rainer Thüringer, TH-Mittelhessen	Extending RISC-V into VLIW/SIMD Architectures for Application-Specific Workloads Gert Goossens, Synopsys	Rapid Prototyping of Autonomous Driving Algorithms on Embedded Platforms Using Docker and MATLAB Benedikt Schlereth-Groh, Technische Hochschule Nürnberg Georg Simon Ohm	Unified Tracing for Zynq UltraScale+ CPU and Programmable Logic in One View Dr. Hendrik Schnack, pickplace Consulting	From Lab to Field: Operating AI Models Across Thousands of Edge Devices Carl Moberg, Avassa	Securing Defence Software: From Threat Modelling to Long-Term Maintenance Dr. Julian Bernet, Witelio
12:15-12:45	Enhancing the Responsiveness of Bluetooth Gaming Controllers with HID over ISO Jan Slupski, Telink Semiconductor	Containers for Embedded Linux; The Next Chapter Drew Moseley, Toradex	CHERI Standardization For All RISC-V Processors From Tiny to Huge Tariq Kurd, Codasip	Active Thermal Balance: Equalizing Silicon Temperature Distribution in Multiphase Systems Kevin Wang, MPS (Monolithic Power Systems)	Utilizing the RISC-V Architecture to Accelerate Real-Time Applications Sean Murphy, MIPS Tech	Modern IDE Workflows for Kernel Linux Module Debugging Matheus Castello, Toradex	Debugging the Invisible: Observability Techniques for Embedded RTOS Systems Dr. Carmelo Loiacono, Green Hills Software	Faster to Efficient and Reliable Edge AI Solutions with Automated MLOps Dr. Axel Plinge, Fraunhofer IIS	No Safety Without Security: Tool-Supported Co-Engineering for Automotive Systems Roman Trentinaglia, Fraunhofer IEM
12:45-13:15	An Introduction to Bluetooth High Data Throughput Damon Barnes, Bluetooth SIG	When Docker Doesn't: What Embedded Engineers Need to Know Joe Schneider, Dojo Five	Industrializing CHERI on RISC-V: VxWorks and Hypervisor Support for Safety-Critical Edge Systems Dmitriy Yelisseyev, Wind River	From Earth to Orbit: The Essential Role of Antennas in NTN-IoT Carmen Redondo, Kyocera AVX	Real-Time Signal Processing and AI on a RISC-V CGRA Prof. Dr. Christian Siemers, Ubitium	Platform, Not Product: Modernizing RCP with Thelia/VSCo and a Broader Tech Ecosystem Enrico Bragante, Infineon Technologies Italia	Accelerating SDV Development with Cloud Debugging and Profiling on Automotive Platforms Vittorio Serra, Lauterbach	Agentic Generative AI on Embedded Devices Michael Uyttersprot, Avnet Silica	Importance of IEC 62443 for Upcoming Regulations Michelle Michael, TÜVIT
13:15-13:30	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A
Lunch Break & Networking					Lunch Break & Networking				
	1.15: Bluetooth in Automotive Applications 	2.9: Real-Time Virtualization	3.12: DevSecOps for Safe & Secure Systems	4.9: Power Supply Design	4.12: Open-Source SoC Hardware	5.12: Technical Debt and Legacy	5.15: Generating Flexible & Efficient Code	7.6: Use Cases 	8.6: Security Applications 2
14:30-15:00	Modular Architecture for Enhanced Vehicle Access with Bluetooth Channel Sounding Martin Cuvelier, NXP Semiconductors	Embedded Virtualization on Arm v8-R: When You Need It, and When You Don't Dr. Carmelo Loiacono, Green Hills Software	Secure By Default: DevSecOps Workflows for CRA-ready Embedded Systems Dr. Marc Thomas, IAR	Comparison of Wireless Power Transfer Methods, Simulation and Analysis of a Standard Resonant Converter Design Dr. Willy Stephen Tounsi Fokui, Teleconnect	Taping-out Open-Source Hardware and the Reproducibility Gap Dr. Augusto Hoppe, Fraunhofer IIS	The Breeding and Rearing of Technical Debt Ingo Nickles, Vector Informatik	Honey, I Blew Up the Code. Binary Size Reduction in Practice Dr. Andreas Wilhelm, CQSE	Using Industry-standard AI Techniques to Solve Real-world Display Problems at the Edge Derek Solven, Synaptics	Automated Identity Management for Embedded Components Florian Handke, Campus Schwarzwald
15:00-15:30	Seamless Handover of Bluetooth LE Connections for Enhanced User Experience Bhargavi Nisarga, Texas Instruments	An Open Hypervisor for Automotive Zonal Controllers José Martins, OSYX Technologies	Agent-Driven DevSecOps: Transforming Embedded Software Development Rainer Poisel, honeytreeLabs Cooperation	Comparing Solar Cells and Power Management Circuits Used for Indoor Low Power Wireless Embedded Systems Prof. Dr. Marcel Meli, Applied Science University of Winterthur	Open-Source Silicon: Driving Innovation, Trust, and Security in Embedded Systems Dominic Rizzo, ZeroRISC Inc.	Avoiding New ECU Development: Unlocking Hidden Potential in Legacy Systems Dominik Jürgens, tensor embedded	Web Engines for Embedded Devices: An Introduction to WPE WebKit Mario Sanchez-Prada, Igalia	Optimizing Neural Network Models for Low-Power Edge Hardware in Speech Processing Applications Osman Erman Okman, Analog Devices (ADI)	Beyond Hardware: White-box Cryptography and Obfuscation for Modern Security Rafie Shamsaasef, CommScope
15:30-16:00	Secure Localization with Bluetooth V6.x Channel Sounding for Localization and Smart Keys in Automotive Systems Rudi Latuske, OpenSynergy	Beyond Containers and VMs: Are Unikernels the Next Stage in Real-Time Virtualization? Moritz Walker, Universität Stuttgart	Next Level DEVSECOPS for a Functional Safety Software Development Process Jeffrey Fortin, Vector Informatik	Reliable Power Supplies: Overvoltage and Avalanche Energy in Mosfets Prof. Markus Rehm, IBR Ingenieurbüro Rehm	Custom Open-Source FPGAs are Here Prof. Dirk Koch, Universität Heidelberg	Keep it 'clean': Practical Strategies for Reducing Build-System and Host Tech Debt Brooke Boeser, Dojo Five	WebAssembly in Safety-Critical Embedded Systems: A Runtime for the Heterogeneous Future Dan Milea, Wind River	Lessons Learned Designing an Edge AI ASIC for Audio Applications Matteo Vit, Starware Design	From Cloud to Car: Edge AI in Next-Generation Automotive Cybersecurity Gregor Knappik, VicOne
16:00-16:15	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A	Discussion/Q&A